

What is Claimed is:

1. A burner assembly for a gas burner of radiant heating type comprising:
a burner chamber for receiving mixed gas;
a burner mat on a top of the burner chamber having a combusting area, and at
5 least one non-combusting area; and
a combustion cutoff part for forming the non-combusting area of the burner mat.
2. The burner assembly as claimed in claim 1, wherein the combustion cutoff
part includes a structure for forming the non-combusting area between a center and an
10 outer part of the burner mat.
3. The burner assembly as claimed in claim 2, wherein the combustion cutoff
part includes a cutoff plate in close contact with an upper surface or a lower surface of
the burner mat for preventing the mixed gas from reaching to a surface of the burner
15 mat, and burning.
4. The burner assembly as claimed in claim 3, wherein the cutoff plate has a
ring form when seen in a plan view.
- 20 5. The burner assembly as claimed in claim 3, wherein the cutoff plate further
includes a supporting part for supporting the cutoff plate to be in close contact with the
burner mat.
6. The burner assembly as claimed in claim 5, wherein, in a case the cutoff plate
25 is in close contact with a lower surface of the burner mat, the supporting part has one

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end fixed to a bottom surface of an inside of the burner chamber, and the other end supporting a lower surface of the cutoff plate.

7. The burner assembly as claimed in claim 5, wherein, in a case the cutoff plate
5 is in close contact with an upper surface of the burner mat, the cutoff plate has one end fixed to a bottom surface of an inside of the burner chamber, and the other end passed through the burner mat, and connected to the cutoff plate.

8. The burner assembly as claimed in claim 7, wherein the other end of the
10 supporting part is connected to the cutoff plate with screws.

9. The burner assembly as claimed in claim 8, further comprising a sealing
member between the other end of the supporting part and the cutoff plate for preventing
the leakage of the mixed gas from the burner chamber.

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10. The burner assembly as claimed in claim 5, wherein the supporting part has
openings in a side surface thereof for smooth flow of the mixed gas.

11. The burner assembly as claimed in claim 5, wherein the supporting part is
20 of a mesh form.

12. The burner assembly as claimed in claim 1, wherein the burner mat includes
an inner burner mat and an outer burner mat, each having the combusting area, and a
separate part between respective burner mats has the combustion cutoff part to form the
25 non-combusting area.

13. The burner assembly as claimed in claim 12, wherein the combustion cutoff part includes;

a cutoff plate in close contact with a circumference of each of the separated
5 burner mats, and

a supporting part connected to the cutoff plate having seating steps for seating the circumferences of the burner mats thereon, respectively.

14. The burner assembly as claimed in claim 1, wherein the combustion cutoff
10 part includes a structure for forming a non-combusting area at the center part of the burner mat.

15. The burner assembly as claimed in claim 14, wherein the combustion cutoff part includes;

15 a cutoff plate in close contact with an upper surface or a lower surface of the burner mat for preventing the mixed gas from reaching to a surface of the burner mat, and

a supporting part for supporting the cutoff plate such that the supporting plate maintains a state in which the burner mat is in close contact with the burner mat.

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16. The burner assembly as claimed in claim 15, wherein, in a case the cutoff plate is in close contact with a lower surface of the burner mat, the supporting part has one end fixed to an upper surface of an inside of the burner chamber for maintaining a state in which the cutoff plate is in close contact with the burner mat, and the other end
25 supporting a lower surface of the cutoff plate.

17. A burner assembly for a gas burner of radiant heating type comprising:

a burner chamber for receiving mixed gas;

5 a burner mat on a top of the burner chamber having a combusting area, and at least one non-combusting area;

a cutoff plate in close contact with at least one of a lower surface and an upper surface of the burner mat to form the non-combusting area in the burner mat for preventing the mixed gas from reaching to a surface of the burner mat and burning thereon; and

10 a supporting part for maintaining a state in which the cutoff plate is in close contact with the burner mat.

18. A burner assembly for a gas burner of radiant heating type comprising:

a burner chamber for receiving mixed gas; and

15 a burner mat part on top of the burner chamber, including;

an inner burner mat and an outer burner mat each having a combusting area, and

a separated part between the inner burner mat and the outer burner mat having a non-combusting area.

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19. The burner assembly as claimed in claim 18, wherein the separated part between respective burner mats includes;

a cutoff plate in close contact with a circumference of an upper surface of each of the burner mats, and

25 a supporting part connected to the cutoff plate having seating steps for seating

the circumference of each of the burner mats.

20. The burner assembly as claimed in claim 19, wherein the separated part between respective burner mats further includes a connecting member for connecting
5 the burner mats, and surrounding a part of the connected part.

21. A burner assembly for a gas burner of radiant heating type comprising:
a burner chamber for receiving mixed gas;
a burner mat on a top of the burner chamber having a non-combusting area at a
10 center;
a cutoff plate in close contact with at least one of a lower surface and an upper surface of the burner mat to form the non-combusting area in the burner mat for preventing the mixed gas from reaching to a surface of the burner mat; and
a supporting part for maintaining a state in which the cutoff plate is in close
15 contact with the burner mat.

22. A burner assembly for a gas burner of radiant heating type comprising:
a burner chamber for receiving mixed gas; and
a burner mat on top of the burner chamber having a combusting area for
20 making combustion, and at least one non-combusting area for making no combustion.

23. The burner assembly as claimed in claim 22, wherein the non-combusting area of the burner mat is formed of a material that permits no surface combustion different from the combusting area.